

INSTALLING AND RUNNING LYNXTRAK (Ver. 1.0)

Your copy of **LynxTrak** is a runtime version contained in the self-extracting file **lynxtrak.exe** for Windows 95/NT. The model is run in the program shell **Exsys**, which will allow you to use this application fully without being able to modify the rules or components.

INSTALLATION:

From the ADF&G web site (www.state.ak.us/adfg/wildlife/fur/lynxtrak.exe):

- Download file to a directory named C:\LynxTrak on your hard drive or to another directory name if you prefer.
- 2. Click on the Windows **Start** button at the bottom of your screen, then click on the **Run** button, and then type **C:\LynxTrak** (or the other name you used) or click on the **Browse** button to find the file.
- 3. A new window (**Winzip Self-Extractor [LynxTrak.exe]**) will appear asking you where you want the unzipped files to be stored.
- 4. In the space provided, it is recommended you type **C:\LynxTrak**. You may choose to use another directory name, such as a subdirectory, to store the unzipped files.
- 5. Click on the **Unzip** button.

6. All the files needed to run the model are now available in the **LynxTrak** folder (or the other folder you have chosen). The 2 active files you will use are **exsys_run.exe** (the runtime program shell) and **lynxtrak.rb1** (the expert-system model).

From E-Mail:

- 1. Save the attached file to **C:\LynxTrak** or to another directory name if you prefer.
- 2. Click on the Windows **Start** button at the bottom of your screen, then click on the **Run** button, and then type **C:\LynxTrak** (or the other name you used) or click on the **Browse** button to find the file.
- 3. A new window (Winzip Self-Extractor [LynxTrak.exe]) will appear asking you where you want the unzipped files to be stored.
- 4. In the space provided, it is recommended you type **C:\LynxTrak**. You may choose to use another directory name, such as a subdirectory, to store the unzipped files.
- 5. Click on the **Unzip** button.
- 6. All the files needed to run the model are now available in the **LynxTrak** folder (or the other folder you have chosen). The 2 active files you will use are **exsys_run.exe** (the runtime program shell) and **lynxtrak.rb1** (the expert-system model).

From Diskette:

- 1. Insert the disk into the A: drive. You may either unzip the files from the A: drive or save the self-extracting zip file to **C:\LynxTrak** (or to another directory name you prefer) on your hard drive and unzip it from there.
- 2. Click on the Windows **Start** button at the bottom of your screen, then click on the **Run** button, and then type **A:\LynxTrak** to extract files from the A: drive or type **C:\LynxTrak** (or the other name you used) to extract files from the C: drive. You may also click on the **Browse** button to find the file on either drive.
- 3. A new window (**Winzip Self-Extractor [LynxTrak.exe]**) will appear asking you where you want the unzipped files to be stored.
- 4. In the space provided, it is recommended you type **C:\LynxTrak**. You may choose to use another directory name, such as a subdirectory, to store the unzipped files.
- 5. Click on the **Unzip** button.
- 6. All the files needed to run the model are now available in the **LynxTrak** folder (or the other folder you have chosen). The 2 active files you will use are **exsys_run.exe** (the runtime program shell) and **lynxtrak.rb1** (the expert-system model).

PROGRAM ACTIVATION:

- 1. Click on Start, then on Run, and then on **exsys_run.exe** in the appropriate directory. This will launch the runtime version of the program shell **Exsys**.
- 2. From the main menu bar at the top, click on **File** and the **Open** button. You can then either double-click on **lynxtrak.rb1** or click on it once and then on **Open**. A new window with the title "LynxTrak: A Tool for Lynx Harvest Managers" will appear. Click once on **Run Expert System** to launch the model **LynxTrak**.

You can also activate the program by setting up an icon on your start-up menu. To do this, click on the Windows **Start** button at the bottom of your screen. Under **Settings**, click on **Task Bar** and then **Start Menu Programs**. Click on **Add** and enter the path for the file **exsys_run.exe** (use the browse feature if you don't remember the correct path), then click on **Next** to name the shortcut. I suggest you rename it **LynxTrak**. Click on **Finish**. The icon for **exsys_run.exe** and the name **LynxTrak** should appear under **Programs** on the **Start Menu**. Clicking once on the icon will launch the program file **exsys_run.exe**. Follow step 2 above to activate the model **LynxTrak**.

RUNNING LYNXTRAK:

- LynxTrak begins with a brief introduction about how the model works and what the user should expect from it. Click once on the button Continue to move to the next screen where you will begin entering your input into the model. For a thorough discussion of the model, please refer to the paper, An Expert–System Model for Lynx Management in Alaska, which is available from me at the address below.
- Because the rules in the model use an if—then format, the questions the model asks are expressed as statements with fill-in-the-blank answers. Most questions have multiple-choice answers provided. Click on the correct answer and then click **OK** or hit the enter key. You may need to use the scroll bar on the right side of the window to view all possible answers. Most questions allow only 1 value, which will be indicated at the top of the window by the phrase "Select ONLY ONE value." A few of the questions are variables for which you will need to enter your data directly. For example, the question labeled HABITAT will ask you to enter "The amount (km²) of lynx habitat in the area." After you answer the question, click **OK** or hit the enter key.
- At any point while you are running the model, you may examine the known data, the rules being addressed, and the sources for the values presented by clicking on **Question** on the main menu bar. **Known Data** will tell you what input you have entered so far. **Why** will tell you the rule being tested and which **If** questions are true (black type), which ones are false (red type) and which ones are yet to be tested (blue type). You may examine the source of any **If** statement by clicking on it and then clicking on **Source**. **Notes**, shown in the box at the bottom of the **Why** window, are available for the first 50 rules. Future versions of the model will contain more notes as well as references. Notes may be viewed by using the scroll bar to the right. You may also look backward or ahead to other rules by clicking on the **Prev** or **Next** buttons. When you are ready to continue with the model, click **Done** to close each **Question** window that may be open.

- Please note that you will not have access to 2 items on the main menu bar: (1) Explain Question and (2) Undo Prev. Answer under Question. However, you can record notes in Notebook under Options on the main menu bar. You can also save your input in Save Input under Options and recover your input in Recover Input under Question on the main menu bar. Saving your input is highly recommended because this is the complete record of the knowledge base you used in the model. You may want to use your input again for future comparisons.
- After you have answered all the questions, the model will present the results based on your input. Goals are shown in capital letters with the confidence values presented to the left. The Questions you answered are followed by your response in capital letters. The Variables that the model calculated and those you answered directly are shown by their names in capital letters and their descriptions followed by the derived or given answer, also in capital letters. If you want to see how each variable was derived, click on it and then on How on the bottom menu.
- To help you make the best decision for modifying the lynx season, you should rerun the model a few times after changing some of your input. You may want to bracket your input to consider possible extremes. To make input changes, click on **Rerun**. Next, click on the qualifier or input variable you want to change and then click **Change**. The original input window for that question will appear. Select your new answer and click **OK**. You can change as many of your original responses as you want before rerunning the model. When you are satisfied with your new input, rerun the model by clicking **Rerun**. The results will again be presented as described above, except the previous goals and their confidence values will be shown to the right of the new values for comparison. Some of the old choices may not show because of the new input. You can see all of the old choices for the previous run by clicking on **All**.
- To end your run, click on **Done** in the Results window. The program will ask if you want to run the model again. Click **Yes** to rerun it or **No** to exit the program.
- If you want to terminate the run before it is completed, click on **Cancel Run** under **Options** on the main menu bar. This will take you back to the starting window. You can restart the model by clicking on the **Run Expert System** button.
- To leave the program, click on **Close** or **Exit** under **File** on the main menu bar.
- Results of the run with your input are automatically saved in the file **Lynxtrak.rpt**. This file is in your LynxTrak directory. You can view and edit it through a word processing program such as MS Word or WordPad. Please note that **Lynxtrak.rpt** is appended each time you run **LynxTrak**, so the last set of results represents the most recent run.

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TECHNICAL SUPPORT:

Howard Golden Alaska Department of Fish and Game 333 Raspberry Rd. Anchorage, AK 99518 Phone: (907) 267-2177 Fax: (907) 267-2433

howardg@fishgame.state.ak.us